

Health Sciences Graduate Studies Manual Policies and Procedures College of Medicine University of Saskatchewan

July 2022

Adapted from the 2016 Policies and Procedures of the Department of Anatomy and Cell Biology,

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(Last update: July 2022 by Dr. David Cooper and Dr. Erique Lukong)

Recent Changes

June 2018:

Minimum Stipends introduced (page 5)
Extension to Scholarship eligibility for PhD Students (page 6)
Health Sciences Graduate Scholarship (HSGS) introduced (page 6)
College of Medicine Tuition Bursary (page 7)
Changes to the Health Sciences Travel Award (page 7)
University Graduate Scholarship now unavailable to Health Sciences students (page 8)
Clarification on the role of the Research Advisory Committee Chair (page 11)
Comprehensive Exam Formats clarified (page 14)

July 2022:

Introduction of **Mental Health Stream** (page 2)

Addition of Health Sciences Mission, Vision, and Values (page 2)

Modification to include MPT students to qualify for direct-entry PhD (page 4)

Link to **Application Portal** updated (page 5)

Link to **CGPS Grad Hub** (page 5)

Employment Expectations amended (page 6)

College of Medicine Tuition Award reinstated (page 8)

College of Medicine Course List (page 9)

Requirement of MD-PhD and MPT-PhD students to complete 6 credit units (page 9)

Addition of 3 credit unit limit for HSC 898 special topic courses (page 9)

Modification to RAC discretion of additional course work for MD- and MPT- PHD students (page 9)

HSC 990: timeline for MSc and PhD students clarified; update to number of symposiums offered per year; addition of student responsibility to complete requirement (page 9-10)

CGPS changes to Research Advisory Committee structure (page 12)

Co-Supervisor membership clarified (page 12)

Mandatory requirement of the Student-Supervisor Agreement added (page 13)

Update to CGPS thesis defense process and timeline (page 29)

Update to outdated links (various pages)

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Introduction

The Health Sciences Graduate Program is a unique research-based program within the College of Medicine open to all departments. M.Sc. and Ph.D. projects in the program primarily investigate translational and/or clinical aspects of human disease, health, healthy living, and/or translational research but may also include more biomedical research projects with clinical translation.

Within the Health Sciences Graduate Program, a Mental Health Stream has recently been introduced in conjunction with the Department of Psychiatry. The stream description, potential supervisors, and the course offerings can be found here.

VISION

To establish the Health Sciences Graduate Program as a unique research-based multi-disciplinary program that will continue to attract, retain, train and recognize a diverse group of outstanding graduate students, and mentor and transform them into leaders in their respective fields.

MISSION

To enable diverse groups of graduate students to broaden their perspectives on health sciences research and enhance their career options in an ecosystem where wellness and inclusion are prioritized, excellence is promoted and rewarded, researchers and instructors are committed and dedicated, and where integrity and quality of the graduate programs are valued.

VALUES

- Excellence and innovation
- Honesty and integrity
- Mutual respect and collaboration
- Wellness and social responsibility
- Transparency and fairness
- Scientific accountability
- Leadership accountability
- Equity, diversity, and inclusion
- Inclusion with respect

Program Objectives

Upon completion of the Health Sciences Graduate Program, it is anticipated that both M.Sc. and Ph.D. graduates will have acquired an extensive amount of knowledge, confidence, and understanding in his/her area of research. The Health Sciences Graduate Program aims to foster a student's curiosity and desire to learn while developing critical research skills relative to their field. A graduate student in the current research climate should expect an increasing focus on interdisciplinary and collaborative efforts, both of which are important criteria required to work across disciplines in the Health Research field. At the M.Sc. Level, a student must be able to demonstrate the ability for independent thought, advanced study, and research. At the Ph.D. level, a student must exhibit these desirable qualities as well as demonstrate, upon graduation, that they can sustain a research program.

As per all Graduate Programs within the University of Saskatchewan, the Health Sciences Graduate Program adheres to the policies and procedures presented by the College of Graduate and Postdoctoral Studies (CGPS). Policies and procedures specific to the Health Sciences Graduate Program, outlined within this manual, exist in addition to those enforced by CGPS.

It is an expectation of CGPS and the Health Sciences Graduate Program that all individuals participating in a Graduate Program in any capacity are familiar with the <u>policies and procedures</u>.

The Health Sciences Graduate Program administration is based within the College of Medicine's Vice Dean Research Office (OVDR). Inquiries regarding the program should be directed to ovdr.grad@usask.ca.

Application and Admission Information

Students interested in the Health Sciences Graduate Program should visit the Program's website for more detailed information at:

https://medicine.usask.ca/students/graduate-programs/health-sciences.php

The Health Sciences Graduate Program offers **one formal intake** start date for the program, which coincides with most of the major scholarship and award deadlines for the College of Medicine. Students and Supervisors are encouraged to utilize the formal intake session to maximize funding opportunities.

Primary Intake, September Start Date:

Application Deadlines, must have <u>all</u> documents received by this date:

	September Intake
International Students	January 15 th
Domestic Students	January 15 th
Approximate Notification	March 15 th

Out of Cycle Applicants:

The Health Sciences Graduate Program also accepts applicants out of cycle for all sessions. Out of cycle applicants must follow a unique application process, initiated by their proposed College of Medicine Supervisor. The proposed Supervisor must contact ovdr.grad@usask.ca a minimum of three months prior to the session start date. Potential students must have their completed applications submitted no later than two months prior to the session start date.

	September Intake	January Intake	May Intake
International Students	July 1 st	November 1 st	March 1 st
Domestic Students	July 1 st	November 1 st	March 1st
Approximate Notification	August 1 st	December 1 st	April 1 st

Any out of cycle applications received without prior notification from a supervisor will be removed.

All inquiries regarding start date and admissions policies and procedures should be directed to ovdr.grad@usask.ca.

Entrance Requirements

Master of Science (M.Sc.) Entrance Requirements:

- A four-year bachelor's degree, or equivalent, from a recognized college or university in an academic discipline relevant to the proposed field of study
- A cumulative weighted average of at least 70% (U of S grade system equivalent) in the last two years of study (i.e., 60 credit units)
- Language Proficiency Requirements: Proof of English proficiency may be required for international applicants and for applicants whose first language is not English.
 - Please see the official College of Graduate and Postdoctoral Studies <u>policies</u> for detailed information regarding English language proficiency requirements and minimum scores.

Doctor of Philosophy (Ph.D.) Entrance Requirements:

- Master's degree, or equivalent, from a recognized university in a relevant academic discipline
- A cumulative weighted average of at least a 70% (U of S grade system equivalent) in the last two years of study (i.e., coursework required in Master's program)
- Language Proficiency Requirements: Proof of English proficiency may be required for international applicants and for applicants whose first language is not English.
- The Health Sciences Graduate Program does <u>not</u> offer a direct entry to the Ph.D. program for students possessing only a Bachelor's degree. Promising students have the option to apply for the M.Sc. program and complete a qualifying examination to transfer to a Ph.D. program. More details regarding this process can be found <u>here</u>.

An exception to this rule exists for:

- 1. MD students who have applied, upon acceptance into the medical program, to the MD-PHD program.
- 2. Master of Physical Therapy (MPT) students who have completed their program and are interested in pursuing PhD thesis-based graduate studies.

All complete Health Sciences Graduate Program applications are reviewed by the program committee. Please note that meeting minimum entrance requirements does not guarantee entrance into the program.

Applying to the Health Sciences Graduate Program

Prior to beginning an online application, prospective students must secure a College of Medicine faculty Supervisor in their area of research interest. Information about faculty can be obtained from the College of Medicine <u>faculty directory website</u>, and prospective students may visit <u>here</u> for more information about contacting potential Supervisors. Please note that supervisors within the College of Medicine may not

Health Sciences Graduate Program
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University of Saskatchewan

accept students who qualify with the minimum entrance requirements. The applicants to all College of Medicine awards, and many external awards, must have and maintain an 80% average (see section on Funding below). This may influence a potential supervisor's decision in accepting new students.

Once a supervisor has agreed to supervise a potential Graduate student, the student may begin an online application for admission to the Health Sciences Graduate Program.

Graduate Program applications are submitted through CGPS via: https://grad.usask.ca/admissions/how-to-apply.php#Beforeyouapply

Current and former University of Saskatchewan students can submit their applications through PAWS.

For detailed information about the required admission documentation, please visit the <u>Health Sciences</u> Graduate Program website.

International Applicants

International students will require a study permit to live and study within Canada. Please be aware that obtaining a study permit often takes 6 to 12 weeks. For a more accurate application processing time based on your permanent residence visit the IRCC website. Visit the Government of Canada website to begin the study-permit application-process. Issues obtaining a study permit should be communicated to ovdr.grad@usask.ca as soon as possible. Applications may be granted one deferral to the next term. Delays beyond one term will require applicants to re-apply.

For more information, please visit the International Student and Study Abroad Centre.

Projected living costs for one year in Saskatoon: approximately \$25,000 CAD. For more details regarding the breakdown of living and tuition costs please email ovdr.grad@usask.ca.

After Applying

Prospective students will be notified regardless of their admission status. The Health Sciences Graduate Program must follow University of Saskatchewan policy by recommending that potential Graduate Students be accepted into the program to the CGPS. The CGPS makes the final decision regarding admission to each individual program. If recommended to the CGPS by the Health Sciences Graduate Program, students will receive instructions to forward their official transcripts and English Language Tests (if applicable) to the CGPS prior to their official admission into the Health Sciences Graduate Program.

It is possible for prospective students to <u>check their application status</u> to ensure that all documentation has been submitted properly, however, the OVDR staff appreciate your patience regarding application processing. Applications will not be withdrawn without first contacting the potential student.

The <u>CGPS Grad Hub</u> can also be helpful for onboarding and beginning your Health Sciences Graduate Program.

Funding

It is the expectation of the College of Medicine and the Health Sciences Graduate Program that the amount and duration of a student's funding has been discussed with their proposed supervisor prior to

submitting their application to the Health Sciences Graduate Program. As per the admission guidelines, the details of this discussion are a required application document and should be signed by both the student and the supervisor. Furthermore, graduate students are expected to apply to external and internal funding opportunities for which they are eligible. It is beneficial for both the student and the Supervisor if some, or all, of the stipend for the student is derived from scholarship or assistantship funds. Support from extramural sources generally provides a higher stipend than support from intramural (University of Saskatchewan) sources. Currently, all incoming full-time students **must** receive a stipend of \$16,000/year for their first two years of study at the Master's level and \$18,000/year for their first three years of study at the doctoral level. In the case of a transfer from the Master's to the doctoral level, the doctoral stipend of \$18,000 must be provided for at least two years. The program recognizes an informal "part-time" status for individuals who are engaged in other healthcare-related professional employment and training commitments. These individuals may request an exemption from the minimum stipend at the time of admission. Students and supervisors are encouraged to discuss potential strategies for further support beyond these timeframes prior to admission, noting that most opportunities including the Health Sciences Graduate Scholarships require matching supervisor funds.

Employment Expectations

Students supported by scholarship and/or grant funds are not encouraged to obtain employment outside of their program. The expectation is that such students treat their Graduate Program as a full-time job, spending a minimum of 40 hours/week completing coursework and research. All employment and external funding must be clarified upon entry, as it may affect a student's eligibility to apply for additional funding. Students are not permitted to engage in separate, paid departmental or non-departmental employment (including teaching) accounting to more than 20 hours/week while receiving scholarship and/or grant funds. Additional restrictions on employment may be placed on international students. Such students should familiarize themselves with the legal requirements of their visas.

Scholarship Opportunities

There are several funding opportunities to which Health Sciences graduate students may be eligible. Students are encouraged to look for opportunities beyond those listed in this manual, and questions regarding funding should be directed to ovdr.grad@usask.ca. Please visit the College of Graduate and Postdoctoral Studies Award Index and the College of Medicine Funding Opportunities for more.

Please note that the College of Medicine adheres to the following general policies:

All recipients must have a minimum of 80% GPA in the last two years of complete study or last 60 credits units; in good academic standing; and fully qualified/full-time.

Scholarship holders must not exceed time in program:

M.Sc. without Thesis: 24 months

M.Sc. with Thesis: 36 months

Ph.D.: 60 months

Ph.D. Transfer: 60 months

For questions regarding these policies please contact ovdr.grad@usask.ca.

Health Sciences Graduate Program Opportunities

The Health Sciences Graduate Scholarship

The Health Sciences Graduate program is pleased to offer the Health Sciences Graduate Scholarship (HSGS). The HSGS consists of a limited number of matching scholarships targeting students in the upper years of their program. MSc students are eligible for funding in year two; PhD students are eligible for funding in years three and four. The scholarships at both levels will be awarded to the strongest applicants, of no particular program type, and both are considered matching scholarships requiring Supervisor support. The award amounts are as follows:

M.Sc.: \$19,000 total

\$11,000 awarded/ minimum \$8,000 provided by the student's Supervisor

Ph.D.: \$24,000 total

\$14,000 awarded/ minimum \$10,000 provided by the student's Supervisor

The HSGS competition will be run each spring, following the college wide CoMGRAD competition. For more details regarding this opportunity, please visit the <u>College of Medicine Funding Opportunities</u>.

College of Medicine Opportunities

College of Medicine Graduate Student Awards (CoMGRAD)

The purpose of these awards is to provide support to graduate students and faculty supervisors from the College of Medicine (CoM) who demonstrate a passion for research that has been, or will be, translated into advancements in science. This project is administered by the Office of the Vice Dean Research with the intention of advancing the CoM's profile by increasing dynamic research projects being completed by competitively selected individuals. The CoMGRAD serves as the Health Sciences entry award.

In its inaugural year, the CoMGRAD was a stand-alone, fully-funded award supported by the College of Medicine's Vice Dean Research Office. Ongoing, the CoMGRAD has been adapted to provide a larger number of qualified students with the opportunity for funding. The CoMGRAD is now a cost-sharing award, where the applicant's supervisors are expected to contribute. Additionally, the funding for the CoMGRAD provided by the Vice Dean Research Office will be paired with the College of Medicine Donor Awards, which will provide students performing research in specific areas more flexibility for funding. As a College, we are grateful to have Donors who support Graduate Student research, and we are excited to generate more opportunities for success.

Below are examples of Donor specific funding opportunities (variable each year). While still considered a CoMGRAD award, a student may be supported using these funds. By indicating that an applicant is eligible for these research specific funds, they will expand their fundable range.

- The James Regan Research Award; funding cardiology research
- The Eunice Bilokreli Research Award; funding for cancer, skeletal disease, or neuroscience research with priority given to leukemia, childhood arthritis, and dementia, respectively
- The SCPOR Research Award; funding patient-oriented research

For more details regarding this opportunity, please contact ovdr.grad@usask.ca.

College of Medicine Tuition Award

The College of Medicine Tuition Award Program was re-instated in the 2021-22 academic year to provide financial support to College of Medicine graduate students who are ineligible for stipend/scholarship support due to engagement in professional employment (>20 hours per week) or training activities that preclude a full-time focus on their graduate studies. The specific intent of this program is to support those training for or working within healthcare fields including post-graduate medical residents, nurses, physical therapists, social workers, etc. Practicing physicians are eligible to apply but should note that financial situation (income level) is one of the evaluation criteria. For more information, please click here. The continuation of this program is subject to programmatic review and availability of funds.

College of Medicine Conference Travel Award

College of Medicine graduate students and Post-Doctoral Fellows are encouraged to participate in national and international scientific conferences and workshops, particularly those events which are specifically related to their area of research. Participation in such events is an important element in the training of biomedical and health researchers. The Conference Travel Fund has been established to assist individuals with costs incurred to attend Scientific Meetings. MSc students and Post-Doctoral Fellows are eligible to apply once per program while PhD students are eligible to apply twice.

For more information regarding this opportunity, please visit College of Medicine Funding Opportunities.

College of Graduate and Postdoctoral Studies Funded Awards

A limited number of Graduate Teaching Fellowships (GTF), Graduate Teaching Assistantships (GTA), and Graduate Research Fellowships (GRF) are awarded by the College of Medicine each year. The deadline for these awards is June 30 (internal program deadlines may apply).

For more details regarding this opportunity, please contact ovdr.grad@usask.ca.

College of Graduate and Postdoctoral Studies Opportunities

Dean's Scholarship

These scholarships are offered to <u>entering</u> students who have outstanding academic records, show research promise, and are registering for the first time in a thesis-based graduate program. This is a matching scholarship. Applications are accepted in December and February.

For more information regarding this opportunity, please visit <u>University of Saskatchewan Dean's Scholarship.</u>

University Graduate Scholarship

As of the 2018/19 academic year these scholarships (other than renewals) will no longer be available to Health Sciences Graduate students.

Tri-Agency Opportunities

Tri-Agency student scholarships are awarded by Canada's three research-granting agencies, the Canadian Institutes for Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC). For current U of S students, the application process, nomination of candidates and administration of the awards is through the College of Graduate and Postdoctoral Studies (CGPS).

For more information regarding these opportunities, please visit Tri-Agency Scholarships.

Program Outline

Coursework

Current details regarding the program coursework can be found in the <u>University of Saskatchewan Course</u> and <u>Program Catalogue</u>. The College of Medicine Course List can be found <u>here.</u>

Health Sciences M.Sc. students will complete a minimum of 9 credit units, and Ph.D. students will complete a minimum of 3 credit units. Students who begin in the M.Sc. program and transfer to the Ph.D. program will be required to complete a minimum of 3 additional credit units after they successfully pass their qualifying examination (totaling 12 credit units). Effective September 1, 2022, all MD-PhD and MPT-PhD students will be required to complete a minimum of 6 credit units. We suggest that these students take courses to increase their research knowledge, such as CLR 800, FDSC 808, or a statistics course. All students who take an HSC 898 course instructed by their supervisor are limited to a maximum of 3 credit units. Additional coursework beyond the minimum credit unit requirements is at the discretion of the student's research advisory committee; this is also applicable for MD-PHD and MPT-PHD students.

Furthermore, students are expected to complete a number of "non-credit" requirements for their program. These non-credit requirements include, but are not limited to: HSC 990, HSC 994/996, GPS 960, GPS 961/962, and a comprehensive exam (Ph.D. students).

It is recommended that students attempt to complete their coursework within the first year of their program to allow maximum time for research and writing in future years.

Some noteworthy points about the Health Sciences Graduate Program required coursework:

- Students must remain registered in their respective research course (HSC 994/HSC 996) every term for the duration of their program.
- Students must remain registered in their seminar course (HSC 990) each winter/fall session for the duration of their program. Attendance is mandatory, and absences must be accounted for.
 Failure to maintain attendance will jeopardize a student's status within the Health Sciences Graduate Program and may render them ineligible to apply to College of Medicine scholarship initiatives.
 - Students are expected to present their research as part of the HSC 990 seminar series.
 M.Sc. students are required to present at least once in the duration of their program,
 typically during year 2 of their program. Ph.D. students are expected to present at least
 twice, they may first present their research proposal (year 2) and their research results

in a subsequent presentation (year 3). Students will be contacted by the ovdr.grad@usask.ca regarding upcoming HSC 990 symposium dates three times per year (approximately October/November, January/February, and April/May of each year). It is the responsibility of the student to sign up and ensure that the required number of presentations are completed prior to thesis defense. Presenting research is a critical part of a student's development as a researcher and working professional. The HSC 990 presentations offer students the opportunity to hone their skills prior to their final defense.

Late registration of a course may be necessary if a student has missed the registration deadline.
 Fill out the <u>Late Registration Form</u> which will be submitted to CGPS. Note that a \$35 late registration fee will be required.

Program Duration

Program Transfers

Transfer from a Master's program to a Ph.D. program shall take place after the end of the first year and no later than the end of the second year in the program.

Recommendation for the transfer must be initiated through a formal meeting of the student's Advisory Committee, which shall forward its recommendation through the academic unit to the CGPS. The following conditions must be met:

- 1) The student shows great promise both in terms of academic accomplishments and in potential for research.
- 2) The student has completed at least 9 credit units at the 800-level and has achieved a minimum average of 80% and no grade below 70%.
- 3) There is evidence of good writing and oral communication ability.
- 4) There is evidence the student has requisite research skills and knowledge to be able to successfully complete a Ph.D. dissertation.
- 5) The student has successfully completed the Ph.D. Qualifying Examination prior to being recommended for transfer. This examination for the purposes of transfer can only be taken once. A student failing the Qualifying Examination, or any part thereof cannot be recommended for transfer.

CGPS policy 4.4.5

Research Advisory Committee

The Health Sciences Graduate Program relies on the expertise of our College of Medicine, and University of Saskatchewan, faculty to guide and mentor our Graduate Students. Students will not only receive guidance from their supervisor, but also from a group of individuals known as their Research Advisory Committee (RAC). A student's RAC should be determined during the application process and the proposed

membership should be included in the supervisor's letter of support. This committee should immediately meet with the student to complete a program of studies form which is to be submitted to ovdr.grad@usask.ca within four weeks of the start of the program. Committees and students should be mindful of the add/drop deadline to avoid paying late registration fees.

Research Advisory Committee Progress Meetings

The RAC is expected to meet a minimum of once a year, in May, to discuss the student's progress. Please note that additional meetings are encouraged: 1) A mini-RAC meeting (about 15-30 minutes) a few months into the program for the students to meet their committee and the RAC to answer any questions that they students may have; 2) Student wellness support meeting that can be requested by both the student and the RAC at any time and in this case, the OVDR Graduate Studies must be notified, and a report submitted (ovdr.grad@usask.ca). Students are expected to connect with the OVDR office regarding the scheduling their yearly meeting. A minimum of one week prior to their meeting date, students are expected to submit the following to their RAC:

- 1. A written research progress report
 - a. An 8–10-page report outlining the details of the project including the information such as background, rationale, objectives, experimental strategy, procedures, and experiments conducted, raw data obtained, interpretations, and any problems or challenges that have been encountered.

The report should be written by the student and Supervisor approval prior to their distribution.

During the meeting, the Committee Chair should facilitate the completion of the following document (submitted electronically):

- 1. HSC 200 Program of Study (first meeting only unless changes are required to the document)
 - a. See "Program of Studies" (page 12)
- 2. GSR 210 Annual Progress Report (required after each meeting)
 - a. Contains information regarding the student's progress in a variety of areas
 - b. Additional comments and questions
 - c. Meeting Minutes, which may be included on the GSR 210 or as a separate word document

The GSR 210 Annual Progress Report must be submitted to ovdr.grad@usask.ca within two weeks of the student's RAC meeting.

The meeting will begin with a brief (approximately 15-20 minutes) presentation by the student to provide an overview of completed coursework and research progress. The Committee Chair is responsible for directing the meeting and recording minutes (either as a section within the GSR 210 Annual Progress Report or on a word document). RAC members are encouraged to ask thought provoking questions and make suggestions. A student or Supervisor may request additional meetings with the RAC at any point in the program, which may be used to discuss program progress, issues that arise, to schedule a comprehensive exam, to request permission to write, or permission to transfer from a M.Sc. to Ph.D., or to discuss wellness. Students are strongly encouraged to utilize their RAC throughout their time in program on an ongoing, informal basis for both research and advising purposes.

Supervisors should note that failure to hold a student's yearly RAC meeting, or to submit the GSR 210 Annual Progress Report (and meeting minutes if they were recorded separately), may result in ineligibility to apply for College of Medicine scholarship/award initiatives or limit a supervisors' ability to bring new students into the Health Sciences Graduate Program.

Administration of the Research Advisory Committee

The RAC for each graduate student functions to approve the Program of Studies (course work and research program) as well as to ensure that the student satisfies all of the requirements of the Health Sciences Graduate Program. The RAC also provides a source of information and counsel for graduate students. In this way, the graduate student will be exposed to a variety of opinions and ideas and can obtain help from individuals with particular expertise required for some aspect of the research project.

Research Advisory Committee Structure

The Health Sciences Graduate Program follows the traditional RAC structure outlined within the CGPS policies and procedures. Changes have been made to the structure of the RAC effective May 1, 2022. A M.Sc. student will have a minimum of two committee members; the Supervisor (and Co-Supervisor if applicable) and at least one additional faculty member. The supervisor may chair the RAC meetings. However, despite this change by CGPS, the Health Sciences Graduate Program has the authority to and will still require that all M.Sc. students must have a minimum of three committee members to ensure a fair voting structure. A Ph.D. student will have a minimum of three committee members; the Supervisor (and Co-Supervisor if applicable), at least one faculty member known as the Cognate member from department external to the student, and one additional faculty members. The supervisor may chair the RAC meetings. A summary of the changes to advisory committees can be found here on the CGPS website. Students in the early years of their program may adopt these changes as well.

When a student possesses more than one supervisor, they will act as one voting member. In the case of Co-Supervisors, MSc students will have a minimum of four committee members, and PhD students will have a minimum of four committee members.

In the Health Sciences Graduate Program, both the student's Supervisor must be <u>College of Medicine</u> <u>Faculty</u>. Additional committee members may be external to the College of Medicine and all RAC members must have the appropriate CGPS appointment.

Research Advisory Committee Functions

- 1) Provide advice and guidance to the graduate student concerning his or her choice of credit course work and other non-credit training requirements.
- 2) Approve the Initial Program of Studies provided by the graduate student approximately four weeks following his or her enrollment in the program, approve the Annual Progress each May, and approve any major changes of direction in the research program. Contact ovdr.grad@usask.ca for the Program of Studies and Annual Progress Report templates.
- 3) Meet with the graduate student to discuss experimental strategy, procedures, experiments conducted, raw data obtained, interpretations, and problems that have been encountered. These meetings should be, in essence, a forum for the exchange of ideas between the student and the committee members.

- 4) The RAC Chair should submit the minutes of meetings, and associated paperwork, which documents approval of the graduate student's program and progress to the Graduate Program Coordinator. Contact ovdr.grad@usask.ca for a meeting minute template.
- 5) Approve or deny requests to transfer from the M.Sc. program to the Ph.D. program and conduct the Qualifying Examination.
- 6) Establish the composition of the Comprehensive Examination Committee for Ph.D. students.
- 7) Approve the request of the graduate student to begin writing the thesis.
- 8) Serve as members of the Examining Committee at the thesis defense.

Supervisor

The major function of the Supervisor is to supervise and direct the graduate student's research on a daily basis. The Supervisor should be actively involved in the student's research program and should be fully aware of the student's progress. The Supervisor is responsible for ensuring that each student under his or her supervision is given the opportunity to fulfill their degree requirements in an orderly and timely fashion.

The <u>Student-Supervisor Agreement</u> from CGPS must be completed by all new students with their supervisor. This must be completed and submitted to <u>ovdr.grad@usask.ca</u> within 12 months of the students graduate program and will be treated as a non-course requirement.

Functions of the Supervisor

- 1) Ensure that the graduate student will be paid the support outlined in the initial statement of financial commitment form. Please contact ovdr.grad@usask.ca for a copy of this form.
- 2) Provide technical expertise and academic advice to the graduate student during selection and design of the research project.
- 3) Provide the graduate student with the facilities, equipment, materials, and supplies that are necessary to perform the thesis research.
- 4) Invite faculty members, in consultation with the graduate student, to serve on the Research Advisory Committee.
- 5) Serve on the Research Advisory Committee.
- 6) Suggest changes in research direction, if necessary, in a timely fashion.
- 7) Assist students in the preparation of research proposals, scholarship applications and the thesis.
 - a. Provide any documentation necessary to support these activities (e.g., letters of recommendation) in a timely fashion.
- 8) Invite faculty from outside the department (M.Sc.) or outside the university (Ph.D.) to serve on the thesis Examination Committee.

Program of Studies

Within 4 weeks of a student's program start date, they must have a meeting with their Supervisor and RAC. This meeting should be initiated by the Supervisor and will consist of introductions and choosing a program of study. It is the expectation that the student's RAC will determine which courses are necessary to develop a well-rounded student. A student may also request the addition of particular courses, to be approved by their RAC. Registration into courses which have not been approved by a student's RAC will

result in additional tuition charges. If requested, the Health Sciences Graduate Program Coordinator will attend this meeting to provide guidance and answer program related questions.

The Program of Studies form containing the above information should be signed by both student and Supervisor and submitted to ovdr.grad@usask.ca. Failure to submit the Program of Study form may result in ineligibility to apply for College of Medicine scholarship/award initiatives.

Research

Where appropriate, research should begin as soon as possible. A Supervisor is responsible for providing all research resources, including but not limited to laboratory space, research materials, instrumentation, instruction, and guidance.

Students should become familiar with the University of Saskatchewan <u>intellectual property rights</u>. Students may not have exclusive right to ownership of materials, data or other intellectual property arising from their research. Other parties who may have an interest in intellectual property arising from the research project include the Supervisor, collaborators, the University of Saskatchewan, and the financial sponsors of the research.

Scientific Development

It is critical to a student's academic maturity that they are exposed to, and participate in, the research and scientific discussion of their colleagues. Active participation of graduate students in seminars, discussions and study groups contributes greatly to this process. The Health Sciences Graduate Program strives to produce well rounded, collaborative researchers. To aid in this process, Health Sciences graduate students must comply with the following requirements:

- Attend all Health Sciences 990 seminars for the entire duration of their program. Students are encouraged to participate actively, asking questions, and contributing to discussions. Failure to attend seminars without valid reason (e.g., conference, illness, etc.) may threaten your status within the program, and limit eligibility to apply for College of Medicine scholarships and initiatives. M.Sc. students are expected to present at least once during their program, and Ph.D. students are expected to present at least twice. Students will be contacted regarding their presentations.
- Students should participate in study groups or journal clubs related to their area of research.
 These groups generally include faculty and students and provide an informal setting in which
 students can discuss and evaluate the current scientific literature, especially as it relates to their
 own areas of interest.
- Students should participate in local, regional, national, and international scientific meetings as
 much as possible. Ideally, graduate students should present an abstract of their work at a national
 or international scientific meeting at least once during their program. Students should discuss
 with their supervisor whether funding is available for travel to scientific meetings for presentation
 of their work. Travel funds may also be available from the College of Medicine and other sources
 to assist students who attend meetings. At an absolute minimum, students should take advantage

- of opportunities to present their work at local and regional forums (e.g., Health Science Research Day).
- Informal discussion of scientific ideas is a mainstay of the research culture. Students should look
 for opportunities to discuss their work, new findings appearing in the scientific literature, or any
 scientific topic of interest with other students, with coworkers, or with faculty members.
 Scientists have chosen this profession because they enjoy the interchange and analysis of
 scientific ideas.

Examinations

Qualifying Examination

Students in the M.Sc. program are not required to take the qualifying examination.

Students who have earned a relevant M.Sc. degree at the University of Saskatchewan, or any other recognized university, are considered qualified for study in the Ph.D. program, and do not need to take a qualifying examination. There may be exceptional cases where International students are required to complete a qualifying exam prior to their official acceptance into the Ph.D. program.

The qualifying examination is typically taken by M.Sc. students who wish to transfer to a Ph.D. program prior to preparing and defending their M.Sc. thesis. This is an option for promising students, who have demonstrated excellent progress within their M.Sc. program. A student who wishes to transfer must complete the qualifying examination after all M.Sc. coursework is complete, but prior to the end of their second year in program. Students must notify ovdr.grad@usask.ca at least 60 days prior to the potential date of their qualifying examination. As per CGPS policies, a student who fails a qualifying examination may take the exam a second time once approved by the Dean of CGPS. Failing a second time will disqualify the student, and they must pursue their M.Sc. Students will be examined by their Supervisor and RAC.

Prior to applying to transfer from a M.Sc. to a Ph.D. a student must:

- Complete a minimum of 9 credit units at the 800 (graduate) level
- Achieve a minimum average of 80% with no individual grade below 70%
- Demonstrated the research, writing and communication skills necessary to complete a Ph.D. program successfully

The structure of the Health Sciences Graduate Program qualifying examination is as follows:

- Student will supply the Supervisor and RAC with a formal written proposal for the Ph.D. project a minimum of one week prior to the examination date.
 - The formal written Ph.D. proposal should contain the following components:
 - A. Descriptive Title, Student's Name, and Date
 - B. Background
 - C. Specific Aims
 - D. Rationale
 - E. Preliminary Results (M.Sc. work)

- F. Proposed Research Plan and Methodology
- G. Significance
- The oral component of the examination will begin with a 15–20-minute presentation by the student demonstrating their proposed research plan and methodology, followed by a rigorous questioning period by the RAC. The student must be able to exhibit sufficient command of their research area.

Upon successful completion of the qualifying exam, the student and Supervisor must submit the GSR 206 form (obtained from the graduate coordinator), and a new Program of Studies form to ovdr.grad@usask.ca. The new Program of Studies form should indicate which course the student will take to complete their 12 credit units of coursework.

Please note, that upon successful transfer to a Ph.D. program, the student's RAC must be revaluated to ensure CGPS policies are followed.

Comprehensive Examination

Students in the M.Sc. program are not required to take the comprehensive examination.

Purpose

The purpose of the comprehensive examination is to ensure that the student understands, can articulate, and can meet the standards of evidence and scholarship in his/her chosen field(s) of research. As noted by CGPS: "The purpose of the comprehensive examination is to determine whether the student has a mature and substantive grasp of the field as a whole." For the Health Sciences Graduate Program the examination will include both a written and oral component and allows the student's Research Advisory Committee (RAC) to evaluate the student's advancing knowledge in the field(s) of study and determine whether the student has a mature grasp of the field as a whole.

Principles

The comprehensive exam should be meaningful to the student and contribute to the student's career development and assess the student's development as an independent thinker.

The comprehensive examination should:

- Demonstrate a student's academic preparedness for an academic career in their chosen area of scholarly interest
- Demonstrate a student's preparedness for research in their specific area of study
- Demonstrate ability to critique existing knowledge as it applies to the area of study
- Demonstrate a knowledge of ethical considerations within human research
- Demonstrate a working knowledge of the statistical and research methodological considerations in research

The comprehensive exam must be completed after any requirements for a qualifying exam have been met. As such, the intent of the comprehensive exam is not to develop introductory knowledge — this should be in place prior to initiation of this process. For example, all required coursework (as determined by the RAC) should be completed prior to undertaking the comprehensive exam. The comprehensive exam is an independent requirement of the Ph.D. program and shall not fulfill additional requirements of the program (i.e., written portions are not intended to streamline towards completion of the dissertation).

Following the completion of coursework requirements, each Ph.D. student must successfully complete a comprehensive examination before he or she can be considered a Ph.D. candidate. The comprehensive examination will be scheduled after course requirements are complete and within the first 2.5 years for a Ph.D. program and within the first 3.5 years for a M.Sc.-Ph.D. transfer program. Note that the comprehensive examination must be held at a meeting separate from the yearly 'research in progress' or 'permission to write' meeting.

The comprehensive exam should be completed no later than one year before the student's defense, to ensure that the student is able to wholly focus on their thesis writing and defense during the last year of the program.

Students will be examined by their supervisor and RAC. The examining panel will be chaired by the student's committee chair.

The Health Sciences Graduate program offers two formats for the comprehensive examination. These are the Grant Proposal format and the Traditional format. Both formats are described below. Please contact ovdr.grad@usask.ca for more details.

Grant Proposal Comprehensive Examination Format

Topics

Topics are research proposals that follow the CIHR Project Scheme model. Topics should be synergistic but not identical to the student's doctoral work. The supervisor, in consultation with the student, will propose three developed topics to the RAC, containing a title and a 300–500-word brief summary, which must include the research question being addressed (this will take approximately 2 – 4 weeks to develop). The supervisor and student will then offer the topics to the RAC a minimum of twelve weeks prior to the anticipated date of the examination. The RAC will vote on which proposal topic they prefer and finalize the topic at least eleven weeks prior to the scheduled oral examination. They may add instructions or questions to clarify the scope or refine the focus of the topic.

Once the student has obtained approval for a topic, they will have 60 days to prepare the written proposal. The oral exam time and venue will be scheduled at this time with the assistance of the OVDR office (ovdr.grad@usask.ca). The completed written proposal will then be circulated to the RAC for evaluation approximately two and a half weeks prior to the exam (two working weeks minimum). One week prior to the oral exam, each RAC member will notify the committee chair of their individual evaluation decision (Pass or Fail). The chair will review and notify the student a minimum of three business days prior to the oral examination of the written examination result (see below).

~16-14 weeks prior to oral exam	Student and supervisor to begin developing three topics for the
	RAC to review
~12 weeks prior to oral exam	Submit the three developed topics to RAC for review
~11 weeks prior to oral exam	RAC will finalize topic and notify student by email. From this
	date, student will have <u>60 days</u> to prepare the written proposal.
	Oral exam date scheduled.
~2.5 weeks prior to oral exam	Written proposal circulated to RAC for evaluation
1 week prior to oral exam	Each RAC member will notify Chair of evaluation (Pass or Fail)
3 business days prior to oral exam	Chair will notify student of evaluation (Pass or Fail)

Format of Written Examination

Students will be required to assemble a CIHR Project Scheme (2017-18) grant with slight modifications to the format (alterations detailed below). Students should note that the wording from CIHR below focuses on field-leading research. While we encourage the pursuit of such excellence the grant proposal will not be evaluated for how transformative the research is but rather how clearly and rationally the proposal identifies a problem and aims to address it.

Note: For criterion 2.2 below, students are not required to estimate time commitments for themselves or team members. Further, the expertise of the student will not be assessed in terms of the feasibility of the grant. The inclusion of hypothetical team members and environment will only be assessed to ensure that due consideration has been given to the overall feasibility of all aspects of complex projects.

Modified CIHR Project Scheme Format:

- **Summary** 3500 characters (including spaces)
- <u>Proposal</u> (10 page maximum including figures, tables, and references, single spaced):

Proposal Criterion 1 (Concept)

"This criterion is intended to assess the quality of what is being proposed, the value of the anticipated project contributions, and any advances in health-related knowledge, health care, health systems, and/or health outcomes.

Is the project idea creative?

- The project idea is among the best formulated ideas in its field, stemming from new, incremental, innovative, and/or high-risk lines of inquiry; new or adapted research and knowledge translation/commercialization approaches/methodologies and opportunities to apply research findings nationally and internationally.
- Is the rationale of the project idea sound?
- The project rationale is based on a logical integration of concepts.
- Are the overall goals and objectives of the project well-defined?
- The goal states the purpose of the project, and what the project is ultimately expected to achieve.

- The objectives clearly define the proposed lines of inquiry and/or activities required to meet the goal.
- The proposed project outputs (i.e., the anticipated results of the project) are clearly described and aligned to the objectives.
- Are the anticipated project contributions likely to advance health-related knowledge, health care, health systems and/or health outcomes?
- o The context and needs (issues and/or gaps) of the project are clearly described.
- The anticipated contribution(s) are clearly described and should be substantive and relevant in relation to the context of the issues or gaps.
- The anticipated contribution(s) are realistic, i.e., directly stemming from the project outputs, as opposed to marginally related."

Source (2017/18): (http://www.cihr-irsc.gc.ca/e/49560.html)

Proposal Criterion 2 (Assessment of Feasibility)

Sub-criterion 2.1: Approaches and Methods (50%)

This sub-criterion is intended to assess the quality of the project's design and plan; including how and when the project will be completed.

- Are the approaches and methods appropriate to deliver the proposed output(s) and achieve the proposed contribution(s) to advancing health-related knowledge, health care, health systems, and/or health outcomes?
- The research and/or knowledge translation/commercialization approaches, methods, and/or strategies should be well-defined and justified in terms of being appropriate to accomplish the objectives of the project.
- Opportunities to maximize project contributions to advance health-related knowledge, health care, health systems and/or health outcomes should be proactively sought and planned for but may also arise unexpectedly.
- Are the timelines and related deliverables of the project realistic?
- Timelines for the project should be appropriate in relation to the proposed project activities. Key milestones and deliverables should be aligned with the objectives of the project and be feasible given the duration of the project.
- Does the proposal identify potential challenges and appropriate mitigation strategies?
- o Critical scientific, technical, or organizational challenges should be identified, and a realistic plan to tackle these potential risks should be described. An exhaustive list is not expected.

Sub-criterion 2.2: Expertise, Experience and Resources (25%)

An estimate of the number of hours per week (contribution) for each applicant working on the project should be provided.

This sub-criterion is intended to assess the appropriateness of the complement of expertise, experience, and resources among the applicants (Nominated Principal Applicant,

Principal Applicant(s), and Co-Applicant(s)), and their institutions/organizations, as it relates to the ability to collectively deliver on the objectives of the project.

It is the responsibility of the Nominated Principal Applicant to ensure the proposed project is poised for success.

- Does the applicant(s) bring the appropriate expertise and experience to lead and deliver the proposed outputs and achieve the proposed contribution(s)?
- The applicant(s) should demonstrate the combined expertise and experience needed to execute the project (i.e., deliver the proposed outputs as well as achieve the proposed contribution(s)). The roles and responsibilities of each applicant should be clearly described and linked to the objectives of the project.
- Is there an appropriate level of engagement and/or commitment from the applicant(s)?
- The level of engagement (i.e., time and other commitments) of each applicant should be appropriate for the roles and responsibilities described.
- Is the environment (academic institution and/or other organization) appropriate to enable the conduct and success of the project?
- Project applicants should have access to the appropriate infrastructure, facilities, support personnel, equipment, and/or supplies to:
 - Carry out their respective roles; and
 - As a collective, manage and deliver the proposed output(s), and achieve the proposed contribution(s).

IHR Committee considerations: appropriateness of the team based on their overall scientific experience (Western, Indigenous, or both) and skills as well as their Indigenous community-based research experience, track record, relevance of past experience, including expertise related to Indigenous lived experience(s).

Source: (http://www.cihr-irsc.gc.ca/e/49560.html)

Budget

o Template based upon CIHR Requirements. CIHR budget template available here.

• Budget Justification (length not restricted)

This section provides a brief overview on the budget categories and what may be included within the respective categories.

1. Research Staff:

- All research staff (research associates, assistants, technicians, etc.) should be determined by the work required for the research and the corresponding technical needs.
- o Salaries for Principal Applicants cannot be paid from the grant.
- Salaries for Knowledge Users cannot be paid from the grant.
- Research Time Allowances cannot be paid from the grant

- Co-Applicants and Collaborators can be paid for their services from the grant as long as they are not considered an <u>independent researcher</u> eligible to apply for CIHR funding.
- 2. **Trainees:** Costs related to the training and mentoring of trainees, and students and knowledge users) are to be included in this section.
- 3. **Consumables:** CIHR grant funds may be used to cover only the direct costs of research (materials and supplies, services, travel for research activities, etc.) and may not be used for indirect costs.
- 4. **Non-Consumables:** Funding for equipment may be requested for this competition. Equipment is defined as any item (or interrelated collection of items comprising a system) of nonexpendable tangible property, having a useful life of more than 1 year and a cost of \$2,000 or more, which is used wholly or in part for research. Maintenance and operating costs of equipment are also eligible expenses.
- 5. **Knowledge Translation:** Costs associated with dissemination of research results such as manuscript publication, travel for knowledge translation activities (e.g., conferences), etc. are to be included in this section.
- 6. **Other:** Costs associated with any other expenses related to the proposed project that are not covered in the above categories are to be included in this section.

• <u>CCV</u> – Current – CIHR Funding Format

It is expected that the grant will be an original work of the student with minimal input[†] from the supervisor and others. Students have access to the Writing Centre Workshops for help editing the written component of their comprehensive exam by clicking on the following link: https://library.usask.ca/studentlearning/writing-help/

[†]Acceptable assistance includes consultation regarding formatting and structure. Supervisors and others cannot critique, edit, or provide content prior to submission.

Results of Written Examination (Grant Proposal Format Only)

Prior to the oral examination, RAC members will determine a grade based on consensus or majority vote (if consensus cannot be reached). The RAC will consider the CGPS Grading System – Literal Descriptors (appended below) with a minimum pass mark of 70% when determining the overall grade for the exam. Committee members will rate the student's written examination as:

- I. Pass: the written examination (grant) is acceptable in its current form. Here acceptable should correspond to 1) Excellent 2) Exceptional or 3) Good in the University of Saskatchewan grading system. The member is satisfied with student's knowledge and is prepared to continue with the oral examination. There may be areas where the reviewer has questions about the grant that need clarification. So long as the lack of clarity does not result in the grade being assessed at a less than "good" (<70%), the written exam should still be considered a pass and these issues can be brought up and clarified at the oral exam.
- II. **Fail:** the student's work is deemed inadequate. The member is unwilling to continue with the examination as they feel the student is not sufficiently prepared for Ph.D. candidacy.

The student must receive a pass (majority decision of the RAC) on the written component prior to proceeding with the oral exam.

In the event of a **Fail** being received for the written component:

- The oral component will not be undertaken.
- The student has a maximum of one year to take the examination a second time. Generally, a second attempt will occur within 2-3 months.

Oral Examination Preparation

The oral exam will take place three weeks following submission of the grant proposal. During the oral exam, the student is expected to be able to discuss key areas or fields of research that are related to his/her own field(s) of study, by answering questions posed by the examination committee based on, or supplementing, the written grant proposal. The scope of the oral exam is not restricted to the grant proposal but may also explore the student's ability to demonstrate a breadth and depth of understanding in the chosen topic area.

The oral examination requires participation of <u>all</u> committee members (conference call is acceptable). Should a student's committee consist of more than the minimum number of voting members as per CGPS policy, they are still all required to participate and vote for the comprehensive examination. Additional examiners may be added at the committee's discretion.

Process of the Oral Examination

The oral exam will consist of the student giving a 10-minute PowerPoint presentation to the RAC. The RAC members will then have two rounds of questions about the proposal with the objective of ensuring that the student has a mature grasp of the field as a whole. The examination will normally last 2-3 hours and will proceed as follows:

Round 1: Each member has up to 20 minutes to evaluate the candidate.

Round 2: No time limit per examiner. If the examiner is satisfied, they may pass.

Following completion of round 2, the student will be asked to leave, and the committee will meet to render a decision.

At any time during the examination the candidate may request a 15-minute break. The chair will ask the committee if a break is required at the completion of round 1.

The student must be able to:

- To discuss the theory, concepts and issues related to the grant proposal
- To coherently articulate the research problem
- To justify the need for research in this area
- To prepare a comprehensive plan for a research grant application as outlined above
- To respond thoughtfully to questions demonstrating critical thinking and advanced problem solving
- To demonstrate attributes and behaviors consistent with an advanced level research student (e.g., motivation to learn)

Traditional Comprehensive Examination Format

In this format the student will prepare three papers (approximately 10 double-spaced pages each) in advance of the oral exam. Four suitable topical areas of relevance to the student's research area will be decided upon by the RAC in consultation with the student. Two of these options must include methodological content (e.g., research design, statistics, methodologies, etc.) and only one of the three may focus specifically on the student's thesis area. The student must pick at least one of the methodological content topics along with two others (a total of three). An examiner will be assigned for each area. In the event that the RAC does not possess the expertise necessary to exam the topics, additional faculty examiners (members of CGPS) may be identified and temporarily added to the RAC. The examiners will each provide a question within their topic for the student to address within a corresponding paper. The student will then have 60 days to prepare the three papers. The oral exam time and venue will be scheduled at this time with the assistance of the OVDR office (ovdr.grad@usask.ca).

The completed papers will be circulated to the RAC for evaluation approximately two and a half weeks prior to the exam (two working weeks minimum). One week prior to the oral exam, each examiner will notify the Chair of their individual evaluation decision (Pass or Fail) for their question. The student must receive a pass for all three papers in order to proceed to the oral exam. The Chair will review and notify the student a minimum of three business days prior to the oral examination of the written examination result.

~16-14 weeks prior to oral exam	RAC decides the four topical areas and examiners
~12 weeks prior to oral exam	Student is provided with potential questions
~11 weeks prior to oral exam	Student identifies three questions and has 60 days to complete
	the papers. Oral exam date scheduled.
~2.5 weeks prior to oral exam	Papers circulated to examiners for evaluation
1 week prior to oral exam	Examiners notify Chair of evaluation (Pass or Fail) for their
	questions
3 business days prior to oral exam	Chair will notify student of evaluation (Pass or Fail)

Format of Written Examination

The student will prepare a paper of approximately 10 double-spaced pages in length (not including references) to address each question. The papers may be referenced in a style appropriate to the student's research area and agreeable to the RAC.

It is expected that the papers will be original works of the student with minimal input¹ from the supervisor and others. Students have access to the Writing Centre Workshops for help editing the written component of their comprehensive exam by clicking on the following link: https://library.usask.ca/studentlearning/writing-help/

¹ Acceptable assistance includes consultation regarding formatting and structure. Supervisors and others cannot critique, edit, or provide content prior to submission.

Prior to the oral examination each examiner will determine a grade based upon their assessment of their question. The examiners will consider the CGPS Grading System – Literal Descriptors (appended below) with a minimum pass mark of 70% when determining the overall grade for the exam. Committee members will rate the student's written examination as:

- I. Pass: the written examination (paper) is acceptable in its current form. Here acceptable should correspond to 1) Excellent 2) Exceptional or 3) Good in the University of Saskatchewan grading system. The member is satisfied with student's knowledge and is prepared to continue with the oral examination. There may be areas where the reviewer has questions about a paper that need clarification. So long as the lack of clarity does not result in the grade being assessed at a less than "good" (<70%), the written exam should still be considered a pass and these issues can be brought up and clarified at the oral exam.
- II. **Fail**: the student's work is deemed inadequate. The member is unwilling to continue with the examination as they feel the student is not sufficiently prepared for Ph.D. candidacy.

A passing grade for all three papers is required to proceed to the oral exam. If a grade of fail is given for one or more papers the oral exam will be postponed and the student given 2 weeks per failed paper to address the examiner comments. If at this time a passing grade is received, an oral exam will be scheduled soon as possible. If a failing grade is received a second time the student will not advance to the oral exam and the comprehensive exam is failed. If this occurs on the first attempt the result is failed with requirement for reexamination and, as identified by the committee, completion of additional work; if this is a second attempt the result is failed with recommendation to discontinue.

Oral Examination Preparation

The oral exam will take place within three weeks after of submission of the papers. During the oral exam, the student is expected to be able to discuss the areas under examination as well as fields of research that are related to his/her own field(s) of study, by answering questions posed by the examination committee based on, or supplementing, the written part of the exam. The scope of the oral exam is not restricted to the papers but may also explore the student's ability to demonstrate a breadth and depth of understanding in the chosen topic area.

The oral examination requires participation of <u>all</u> committee members (conference call is acceptable). Should a student's committee consist of more than the minimum number of voting members as per CGPS policy, they are still all required to participate and vote for the comprehensive examination. Additional examiners may be added at the committee's discretion.

Process of the Oral Examination

The oral exam will consist of two rounds of questions with the objective of ensuring that the student has a mature grasp of the topical areas and the field as a whole. The examination will last no more than three hours (normally 2-3) and will normally proceed as follows:

Round 1: Each member (depending on committee size) has 10-20 minutes to evaluate the candidate. Round 2: Generally briefer than round 1. If the examiner is satisfied, they may pass.

Following completion of round 2, the student will be asked to leave, and the committee will meet to render a decision.

At any time during the examination the candidate may request a 15-minute break. The chair will ask the committee if a break is required at the completion of round 1.

The student must be able to:

- To discuss the theory, concepts and issues related to the three papers and their thesis research area
- To respond thoughtfully to questions demonstrating critical thinking and advanced problem solving
- To demonstrate attributes and behaviors consistent with an advanced level research student (e.g., motivation to learn)

Results of Oral Examination (Both comprehensive examination Formats)

At the completion of the oral exam, the RAC will determine a grade based on consensus or majority vote (if consensus cannot be reached). The RAC will consider the CGPS Grading System – Literal Descriptors (appended below) with a minimum pass mark of 70% when determining the grade for the oral exam. The RAC will select one of the following four outcomes based on the student's performance:

- I. **Pass**: the student's answers are acceptable in their current form. Here acceptable should correspond to 1) Excellent or 2) Exceptional in the University of Saskatchewan grading system.
- II. **Conditional Pass**: the student's answers are defensible yet may be lacking in some regard. Here defensible should correspond to Good in the University of Saskatchewan grading system. Specifically, the examiner(s) may request that a student address a focal deficit of their knowledge as conveyed by their written work and answers within the oral exam. The extent of further work must be achievable within a two-week period following the exam and may include a revision to the written portion or a brief oral presentation. The expectations for further work must be precisely conveyed to the student. If the shortcoming cannot be addressed in this brief timeframe a decision of Failed with requirement for reexamination should be given.
- III. **Failed with requirement for reexamination** and as identified by the committee, completion of additional work; or
- IV. Failed with recommendation to discontinue.

A student failing a comprehensive examination is permitted a second examination (within 12 months maximum) with permission of the Dean of the College of Graduate Studies and Research. A second examination will normally take place within 2-3 months of the first examination. A second failure requires student withdrawal from the program.

PhD students successfully completing the comprehensive examination are referred to as PhD candidates.

Grading the Comprehensive Examination

The RAC/examination committee will evaluate either the written and/or oral components of the student's performance in the light of the CGPS literal descriptors below. Based on his/her evaluation each committee will specify whether the student has demonstrated an overall standing of at least 70 – 79 which is "Satisfactory to Good" on the Literal Descriptors.

CGPS Grading System – Literal Descriptors

Relationship between Literal Descriptor and Percentage Score

90-100 Exceptional

A superior performance with consistent strong evidence of

- a comprehensive, incisive grasp of subject matter;
- an ability to make insightful, critical evaluation of information;
- an exceptional capacity for original, creative and/or logical thinking;
- an exceptional ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently;
- an exceptional ability to analyze and solve difficult problems related to subject matter.

80-89 Very Good to Excellent

A very good to excellent performance with strong evidence of

- a comprehensive grasp of subject matter;
- an ability to make sound critical evaluation of information;
- a very good to excellent capacity for original, creative and/or logical thinking;
- a very good to excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently;
- a very good to excellent ability to analyze and solve difficult problems related to subject matter.

70-79 Satisfactory to Good

A satisfactory to good performance with evidence of

- a substantial knowledge of subject matter;
- a satisfactory to good understanding of the relevant issues and satisfactory to good familiarity with the relevant literature and technology;
- a satisfactory to good capacity for logical thinking;
- some capacity for original and creative thinking;
- a satisfactory to good ability to organize, to analyze, and to examine the subject matter in a critical and constructive manner;
- a satisfactory to good ability to analyze and solve moderately difficult problems.

60-69 Poor

A generally weak performance, but with some evidence of

- a basic grasp of the subject matter;
- some understanding of the basic issues;
- some familiarity with the relevant literature and techniques;
- some ability to develop solutions to moderately difficult problems related to the subject matter;
- some ability to examine the material in a critical and analytical manner.

<60 Failure

An unacceptable performance.

URL: http://www.usask.ca/calendar/gradstudies/additional/grading/

Appeals

Appeals of comprehensive examination committee decisions will defer to the University of Saskatchewan procedures on Student Appeals in Academic Matters:

A graduate student who has a concern or question about the evaluation of her or his work or performance should consult with the chairperson of her or his advisory committee (or the department or college graduate advisor where no committee exists), the head of the department or the Dean of a non-departmentalized college or the Dean of Graduate Studies and Research before invoking formal procedures. If, after these consultations, the student is unsatisfied, he or she may petition the Ph.D. Committee (Ph.D. students) or the Academic Committee (all other students) of the College of Graduate Studies and Research for a formal ruling on the matter. If the concern relates to a written examination, essay or research paper, the student may request, or the Committee may institute a re-read procedure similar to that described for undergraduate students. If the concern involves any other form of assessment, the Committee shall consider and rule on it.

The ruling by the Ph.D. or Academic Committee of the CGPS on a matter of substantive academic judgment will be final. This includes decisions on the acceptability of the thesis and the results of oral examinations.

For the Health Sciences Graduate Program, the chain of reporting is as follows:

RAC Chair \rightarrow Health Sciences Graduate Chair (Assistant Dean Graduate Studies, College of Medicine) \rightarrow CGPS (Associate Dean).

More detailed information about the Health Sciences Graduate Program comprehensive examination is available on the <u>website</u>. Please note that there are very specific timelines for each exam format which must be adhered to.

Appeals

Appeals of comprehensive examination committee decisions will defer to the University of Saskatchewan procedures on Student Appeals in Academic Matters:

A graduate student who has a concern or question about the evaluation of her or his work or performance should consult with the chairperson of her or his advisory committee (or the department or college graduate advisor where no committee exists), the head of the department or the Dean of a non-departmentalized college or the Dean of Graduate Studies and Research before invoking formal procedures. If, after these consultations, the student is unsatisfied, he or she may petition the Ph.D. Committee (Ph.D. students) or the Academic Committee (all other students) of the College of Graduate Studies and Research for a formal ruling on the matter. If the concern relates to a written examination,

essay or research paper, the student may request, or the Committee may institute a re-read procedure similar to that described for undergraduate students. If the concern involves any other form of assessment, the Committee shall consider and rule on it.

The ruling by the Ph.D. or Academic Committee of the CGPS on a matter of substantive academic judgment will be final. This includes decisions on the acceptability of the thesis and the results of oral examinations.

Academic Integrity Statement

The University of Saskatchewan is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Student Conduct & Appeals section of the University Secretary Website and avoid any behavior that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

For more information on what academic integrity means for students see the Student Conduct & Appeals section of the University Secretary Website at:

http://www.usask.ca/university_secretary/pdf/dishonesty_info_sheet.pdf.

Thesis Preparation and Defense

Writing and editing the thesis document should be a well-planned process that takes several months to complete. When both the student and his/her supervisor believe that the research work is complete, they will initiate a meeting with the student's RAC for permission to write the thesis. Permission must be granted by the majority before the student is allowed to proceed. The permission to write meeting may occur during a regularly scheduled RAC meeting or may be arranged specifically for that purpose.

Structure of the Permission to Write RAC Process

- 1) The student will present a complete outline of the proposed thesis (essentially a table of contents) and preliminary figures of all included results
- 2) The RAC will discuss the research progress, the student's knowledge and understanding of their research area, and the quality and quantity of the results
- 3) The RAC will either grant the student permission to discontinue research and focus on data analysis, or request additional research work (to be specified)

Once a student has been approved to begin writing their thesis, they should consult the <u>CGPS website</u> for detailed information regarding form, format and style. When the thesis is complete, students must submit it to their RAC for internal review and approval. Only once each RAC member has approved the thesis may the defense be scheduled, and the thesis forwarded to the External Examiner.

Defense Timeline

These timelines are strictly enforced by both the Vice Dean Research office and CGPS. Failure to adhere to these timelines will result in rescheduling of the defense. Questions regarding the defense timeline and/or requirements should be directed to the Graduate Program Coordinator at ovdr.grad@usask.ca.

Master's Students:

- **Minimum Four** weeks prior to scheduled defense: submit completed thesis to RAC members for internal review and approval. Note: It will take at least a single week, if not longer, for the RAC to review and approve the student's thesis prior to submission to CGPS. Students should consult with RAC members well in advance to ensure their availability.
- **Minimum Three** weeks prior to scheduled defense: one copy of the approved thesis (in PDF format) is submitted to the Graduate Program Coordinator (ovdr.grad@usask.ca). If the proposed External Examiner is not CGPS Faculty, please include their CV. The Graduate Program Coordinator will submit these items in e-form to the CGPS Service Desk for approval. Once approved, the examiner is required to have the thesis to review for a minimum of two weeks prior to the defense date.
 - The Supervisor should make informal contact with the potential External Examiner
 - Please note, the Graduate Program Coordinator may request a paper copy of the thesis from the student if preferred by the External Examiner
- **One** week prior to scheduled defense: Graduate Program Coordinator will forward all necessary defense documentation to the student's Committee.
- Defense: The oral defense will be conducted with an Examining Committee that includes the members of the RAC, plus the External Examiner. The CGPS no longer requires a non-voting Committee Chair to be appointed for the defense (effective May 1, 2022), but one may be added upon request from the student, supervisor(s), or any committee member. Please refer to the CGPS defense policies for more information.

Doctoral Students:

- **Minimum Six** weeks prior to scheduled defense: submit completed thesis to RAC members for internal review and approval. Note: A single week should be considered the minimum for this stage and a longer period me be required for RAC approval. Students should consult with RAC members well in advance to ensure their availability.
- Minimum Five weeks prior to scheduled defense: a pdf copy of the approved thesis (a hard copy maybe requested depending upon the external examiner's preference, please be prepared to provide this if it is requested) is submitted to the Graduate Program Coordinator (ovdr.grad@usask.ca) along with the CV for the top choice for potential External Examiner recommended by the student's Supervisor and RAC. The Graduate Program Coordinator will submit these items in e-form to the CGPS Service Desk for approval. Once approved, the External Examiner and University Examiner are required to have the thesis to review for a minimum of four weeks prior to the defense date (thesis provided by CGPS).
 - The Supervisor should make informal contact with the potential External Examiner.
- Defense: Effective May 1, 2022, the oral defense will be conducted with an Examining Committee (6 members) that includes the members of the RAC, the Examining committee chair (non-voting), the Supervisor(s), plus the External Examiner and the University Examiner. The Examining Committee is chaired by the Committee Chair. Please review the CGPS policies for appointment and roles of the External Examiner and the University Examiner.

For both a Master's and Doctoral defense, all defense paperwork is to be submitted to the Graduate Program Coordinator *immediately following the examination*, regardless of outstanding signatures or revisions.

For both programs, the Graduate Program Coordinator will perform a final check that the student has satisfied all other program requirements (i.e., submitted ethics, finished coursework, completed comprehensive etc.), before submitting all documentation to CGPS for approval. Once the student has been approved by CGPS, the thesis will be forwarded to the External Examiner. The student and supervisor may have pre-scheduled the defense date or can request that the Graduate Program Coordinator do so. Both M.Sc. and Ph.D. thesis defenses are in the form of an oral examination, approximately three hours in length. The defense begins with a formal twenty-minute summary presentation by the student which is open to the public, followed by a closed question and answer period. If the student and committee agree that the information to be presented within the defense is too sensitive for a public presentation, they can agree to close the entire defense. This requires the unanimous consent of the RAC and the student. If unanimous consent cannot be reached the aforementioned policy will remain in place. Student defenses will be advertised within the College of Medicine approximately one week prior to the scheduled date.

At the conclusion of a thesis defense, the Examining Committee will choose one of five outcomes. For more information please review the <u>College of Graduate and Postdoctoral Studies Policies</u>, or contact ovdr.grad@usask.ca.

External Examiners

The Examiner must have no conflict of interest (collaboration, personal relationship, etc.) with the student, Supervisor, or any member of the RAC. Once identified, the Examiner must have <u>no contact</u> with the student until the day of the oral defense. For more information about the selection criteria for the Examiners, please see the relative CGPS <u>policies and procedures</u>.

Administration of the Graduate Program

Health Sciences Graduate Program Committee

The general functions of the Graduate Program Committee of the Health Sciences Graduate Program are to administer the graduate programs, to ensure that each graduate student fulfills the requirements necessary for an advanced degree in Health Sciences, and to ensure that the standards of the departmental graduate program are maintained. The Graduate Program Committee also serves the following specific functions:

- Assess applications for admission to the graduate program and submit recommendations for action to the Dean of CGPS.
- Guide the formation of RACs.
- Approve the program of course work, initial research proposals, and any substantial alterations in the Program of Studies for each graduate student.
- Assess the progress of students as reported to RACs to ensure that students can complete their degree requirements in a timely and orderly fashion.

- Assess the performance of students seeking transfer from the M.Sc. to the Ph.D. program and recommend discontinuance for students demonstrating unacceptably poor progress.
- Conduct Health Science program graduate scholarship competitions and administer programmatic graduate scholarship funds.
- Advise and provide necessary administrative support for scholarship competition external to the program.
- Advertise and promote the programmatic graduate program.
- Periodically review graduate program policy and institute or recommend improvements when appropriate.
- Prepare documentation for external review of the graduate program.

All members of the Graduate Program Committee shall be appointed by the Assistant Dean of Graduate Studies. This includes a Committee Chair (Assistant Dean or designate), additional regular faculty members, and one graduate student representative. The Graduate Program Committee Chair is responsible for the daily administration of the Graduate Program, and reports to the Assistant Dean of Graduate Studies. Ultimate authority for all matters before the Graduate Program Committee lies with the College of Graduate Studies and Postdoctoral Studies.